State of California

Department of Food and Agriculture Division of Measurement Standards

Certificate Number: 5053(a)-03

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California Type Evaluation Program Certificate of Approval for Weighing and Measuring Devices

For:

Retail Motor-Fuel Dispenser Digital Electronic Computing Model: G2BCDE * (See Page 2) Generic Name: Global Century Series Capacities: 990.00 Total Sale

999.999 Total Volume 9.999 Max. Unit Price

Submitted by:

Dresser Wayne, Dresser Inc.

Corridor Park 1 3814 Jarrett Way Austin, TX 78728 Tel: (512) 388-8311 Fax: (512) 388-8456

Contact: Randal Kretzler

Standard Features and Options

* Specific model designations for features and options covered by this Certificate are listed on Page 2.

			Min Flow Rate	Max Flow Rate
			GPM	GPM
Standard Cap.	2PM-6 or iMeter	3/4" Valve – 3/4" Outlet	0.5	15
Enhanced Cap.	2PM-6 or iMeter	3/4" Valve - 1" Outlet	0.5	20
Special Cap.	2PM-6 meter	1" Valve – 1" Outlet	5	26
Super High Cap.	iMeter	3/4" Valve - 1" Manifold Outlet	6	30

Note: See table on page 2 for model designators

Electronic totalizer Metric capability

Back-lighted sale display Remote or dispenser controlled preset/prepay capability

Capacitance display back up

One or two grade product capability (N/A on Super High Cap. Models)

Category 1 device (see "Sealing") Manual calibration valve (Super High Cap. Models only)

Options:

Electromechanical totalizer Preset
Vapor recovery balance or assist Stop button
1" hose outlets (enhanced capacity) Single sided unit

Non-computing (volume only display) Satellite in use indicator (Super High Cap. Models only)

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: June 4, 2003

Mike Cleary, Director

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Dresser Wayne, Dresser Inc. Retail Motor-Fuel Dispenser Model: G2BCDE

Application: For use to dispense gasoline or diesel fuel in retail motor fuel service stations when interfaced with approved and compatible equipment. The non-computing version is not intended for direct sale applications.

<u>Identification:</u> The identification label containing Weights and Measures information is located inside the lower dispenser housing. Access is gained by opening the lower dispenser housing door with a key. The label is located near the middle of the structural side column approximately 30" from the base of the dispenser. On dispensers manufactured prior to 2003, the metal identification badge is riveted to the base of the device on the lower left corner of the dispenser cabinet.

<u>Model Designations:</u> The main model number for the Global Century Series is G2<u>BCDE</u>. This number may be preceded by a prefix and followed by a suffix that represents optional, non-metrological features.

Prefix	G2	В	C	D	E
Blank 2PM-6	Global Century Model	0 Cabinet Style	0 Standard Cap. 15 GPM	1 Single Inlet Single Outlet Island Oriented	D Remote
Meter	M1 M2 feter feter EM	2 Column	-or- Enhanced Cap. 20 GPM (designated by "2" in suffix) * 1 Special Cap. 26 GPM 2 Super High Cap. 30 GPM	2 Single Inlet Dual Outlet Island Oriented	P Suction
2 DM1 -or- DM2		Style		3 Dual Inlet Dual Outlet Island Oriented	
iMeter 3				7 Single Inlet Dual Outlet Lane Oriented	
3 iMeter + iGEM Electronics				8 Dual Inlet Dual Outlet Lane Oriented	
				9 Dual Inlet Four Outlet Lane Oriented	

*Note: "Standard" capacity models and "Enhanced" capacity models (position C=0) are identical apart from the size of the hose outlets. Standard capacity models have 3/4" outlets while enhanced capacity models have 1" hose outlets. Enhanced capacity models are designated by a "2" in the first suffix of the model number (e.g. 3/G2201D/2).

<u>Sealing:</u> <u>2PM-6 Meter:</u> The meter is adjusted by lifting the adjustment knob on the top of the meter and turning it to increase or decrease delivery amounts. A wire security seal is threaded through the meter shaft above the adjustment knob to prevent access to the adjustment.

DM1 or DM2 "iMeter" (Global Hydraulics Module or Duplex Meter): To adjust the meter, access the Global Century Series pulser mounted on the meter. Place the pulser in the calibration mode by opening the calibration window located on the front of the pulser. Access to the calibration window is prevented by a metal pin, which is inserted and secured to a metal clamp. A security seal is inserted through a hole in the pin to prevent opening of the window without removing the sealed pin. Each calibration window should be sealed separately.

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Dresser Wayne, Dresser Inc. Retail Motor-Fuel Dispenser

Retail Motor-Fuel Dispenser Model: G2<u>BCDE</u>

Sealing (Cont.): When used in Super High Capacity master dispensers, one or two sealable manual valves are used for calibration (see Operation). Under normal operation, the valves are confined to the fully open position by a metal shroud that is held in place by a metal pin. A security seal is inserted in a hole in the pin to prevent closing the valve without removing the sealed pin and shroud.

For the iGEM computer, the Weights and Measures audit trail is accessed by use of a hand-held remote. By entering the Weights and Measures mode, one can view both the blend ratio audit trail and the volume metering unit change counter. The Weights and Measure mode is side specific; therefore, shows the blend ratio logs and volume metering unit logs for the side one is facing. The hand-held remote is available at the station for which you are inspecting. For instruction on how to access the Weights and Measures mode see Certificate of Conformance Number 99-045A3.

For pre-iGEM computers, the audit trail information is accessed by pressing the "Totals" and "Price Jog" rocker switches located underneath the electronics enclosure below the sales display. The event counter is displayed in the "Total Sale" display.

Operation: The dispenser may be controlled by a console or used as a stand-alone device.

<u>Preset:</u> The optional preset feature allows a predetermined amount of product, either in volume or money, to be input prior to the beginning of the sale. The "switch" key allows the user to toggle between volume or money input. The cancel key cancels the preset operation if pressed before the sale begins. The keypad will not function while the dispenser is delivering fuel.

<u>Super High Capacity Dispensers:</u> The Super High Capacity Model 3/G222X dispensers have two iMeters plumbed together to obtain a higher flow rate. The sealing of each iMeter is the same as the other approved dispensers using the iMeter. Each outlet pipe is plumbed into a common connection at the exit of the dispenser cabinet and connected to the delivery hose.

For master dispensers only, additional outlet pipes are plumbed to a common connection that feeds the satellite unit. A sealable manual valve has been incorporated into one leg of each iMeter satellite feed for calibration purposes. The calibration valve is sealed in an open (handle in line with pipe) position for normal operation. The valve is closed when calibrating the individual iMeters.

<u>Satellite Operation – Simultaneous Delivery:</u> Product can be delivered from either the master, satellite or both at the same time. The master switch must be on before product can be delivered from any delivery point, however, the master does not need to be dispensing for the satellite to dispense product.

<u>Satellite Operation – Non-Simultaneous Delivery:</u> Product can be delivered from either the master or the satellite, but not both at the same time. The master switch must be on before product can be delivered from any delivery point. Activating the satellite switch while the master is in use will cause the master to cease dispensing and allow the satellite to dispense. When the satellite switch is turned off, the master can continue dispensing.

Some master models may be equipped with an optional "satellite in use" indicator.

<u>Non-Computing Option</u>: If the device is provided with the non-computing option, the total sale and unit price data are not available. This device is not for direct sale applications.

Note: Suction models may have vent tubing from the air eliminator on the pumping unit to the nozzle boot or to the base of the column.

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Wayne Division Dresser Industries, Inc. Retail Motor-Fuel Dispenser Model: G2BCDE

<u>Test Conditions:</u> This Certificate Supersedes Certificate of Approval Number 5053-00 and is issued to add a new diesel high flow model with optional satellite capability. Two Model 3/G222X dispensers were evaluated for ID requirements, accuracy, and sealing requirements. Two dispensers were installed at a field location, one without a satellite configuration and one with a satellite configuration. The dispensers were initially tested and put into service for 21 days and a throughput of over 20 000 gallons. The dispensers were retested using the same test procedures when placed into service.

This Certificate is also issued to reflect a change in the model's base electronics options. The new optional electronics (iGEM) in the Global Century comes directly from the manufacturer's Vista Series (Certificate of Conformance Number 99-045A3). No additional testing is required based on the previous evaluations and information provided by the manufacturer. The unit's hydraulics section (meters, valves, piping, filters, etc.) has not changed. Due to all components having active Certificates of Approval, additional evaluation or field permanence testing is not required. The test conditions from the previous evaluation are listed below for reference.

<u>Certificate of Approval Number 5053-00:</u> This Certificate was issued based upon information provided by the manufacturer, an NTEP Participating Laboratory evaluation of the interlock mechanism present at the dispenser, accuracy checks at normal and slow flow rates at the manufacturer's facility, and a previous evaluation of the Vista Series (Certificate of Conformance Number 99-045). The Model Global Century is equipped with same electronics and hydraulics as the Model V 395. However, the Century dispenser is designed to operate with the 2PM-6, DM1, or DM2 (iMeter) meters (Certificate of Conformance Number 98-068). The throughput requirements were waived based on the NTEP policy for previously evaluated meters.

The results of these evaluations and information provided by the manufacturer indicate the dispenser complies with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2003 Edition

Tested By: R. W. Wotthlie (MD) 5053-00 and 5053(a)-03, D. Reiswig (CA) 5053(a)-03